

REMARKS

Claims 1 through 20 are currently pending in the application.

This amendment is in response to the final Office Action of August 27, 2003.

35 U.S.C. § 101 Double Patenting Rejection

Claims 1 through 20 are rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 1 and 10 of prior U.S. Patent 6,306,687 (hereinafter referred to as the '687 patent). Applicants respectfully traverse this rejection, as hereinafter set forth.

Applicants submit that a reliable test for statutory double patenting under 35 U.S.C. § 101 is whether a claim in the application could be literally infringed without literally infringing a corresponding claim in the patent. Is there an embodiment of the invention that falls within the scope of one claim but not the other? If there is such an embodiment, then identical subject matter is not defined by both claims and statutory double patenting does not exist. *In re Vogel*, 433 F.2d 438, 164 USPQ 619 (CCPA 1970).

Applicants submit that the embodiments of the presently claimed inventions as set forth in presently amended independent claims 1 and 10 of the present application are different inventions than the embodiments of the inventions as set forth in independent claims 1 and 10 of the '687 patent. For instance, the embodiment of the presently claimed invention as set forth in presently amended independent claim 1 of the present application has an element of the claimed inventions calling for "using a segment of tape having a shape to fit over at least the bonding end of each lead finger of the plurality of lead fingers of the lead frame forming the opening, the segment of tape extending between the plurality of lead fingers across the opening, the segment of tape having a thermosetting adhesive located in a portion thereof" whereas the embodiment of the claimed invention of independent claim 1 of the '687 patent does not. Similarly, the embodiment of the presently claimed invention as set forth in presently amended independent claim 10 of the present application has an element of the claimed inventions calling for "using at least two tape segments shaped to fit over a portion of the ends of the plurality of lead fingers of the lead frame, the at least two tape segments extending across the opening having a size of one

of at least the size of the attachment surface of the semiconductor device and greater than the attachment surface of the semiconductor device” whereas the embodiment of the claimed invention of independent claim 10 of the '687 patent does not. Accordingly, since different embodiments of the presently claimed invention of presently amended independent claims 1 and 10 of the present application and independent claims 1 and 10 of the '687 patent are being claimed, identical subject matter is not defined by corresponding claims and no statutory double patenting under 35 U.S.C. § 101 does or can exist therebetween. Therefore, claims 1 through 20 are allowable.

Applicants request entry of this amendment for the following reasons:

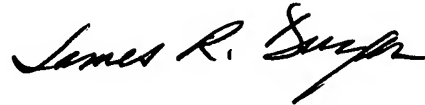
The amendment is timely filed.

The amendment clearly places the application in condition for allowance.

The amendment does not require any further search or consideration.

In summary, Applicants request the entry of this amendment, the allowance of claims 1 through 20, and the case passed for issue.

Respectfully submitted,



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Date: October 9, 2003

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IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method of assembling a semiconductor device and a lead frame comprising:

providing a lead frame having a plurality of lead fingers in strip form having a pair of side rails connecting each lead frame to another lead frame in the strip, each lead finger of the plurality of lead fingers having a bonding end, the plurality of lead fingers forming an opening at least a size of an attachment surface of a semiconductor device, the lead frame having ~~no~~ die paddle for supporting the semiconductor device thereon;

using [forming] a segment of tape having a shape to fit over at least the bonding end of each lead finger of the plurality of lead fingers of the lead frame forming the opening, the segment of tape extending between the plurality of lead fingers across the opening, the segment of tape having a thermosetting adhesive located in a portion thereof;

adhesively attaching the segment of tape to at least the bonding end of each lead finger of the plurality of lead fingers of the lead frame, the segment of tape providing an attachment location for the semiconductor device through use of the thermosetting adhesive; and adhesively attaching the semiconductor device to at least a portion of the segment of tape at the attachment location for the semiconductor device using the thermosetting adhesive located on a portion of the segment of tape, the semiconductor device having a portion thereof located within the opening formed by the plurality of lead fingers of the lead frame.

2. (Original) The method of claim 1, further including:
forming at least one aperture in the segment of tape.

3. (Original) The method of claim 1, further including:
forming a plurality of apertures in the segment of tape.

4. (Original) The method of claim 3, wherein the plurality of apertures substantially forms a grid-like pattern of apertures.

5. (Previously Presented) The method of claim 2, wherein the semiconductor device is attached to the segment of tape such that at least a portion of an outer periphery of the semiconductor device is adjacent to a portion of a periphery of the at least one aperture.

6. (Previously Presented) The method of claim 3, wherein the semiconductor device is attached to the segment of tape such that at least a portion of an outer periphery of the attachment surface of the semiconductor device is positioned within at least one aperture of the plurality of apertures.

7. (Original) The method of claim 1, further including:
wire bonding contacts of the semiconductor device to the bonding ends of the plurality of lead fingers.

8. (Original) The method of claim 1, further including:
packaging the semiconductor device in an encapsulating material to form a packaged semiconductor device.

9. (Original) The method of claim 8, further comprising:
forming the segment of tape to fit within the encapsulating material.

10. (Currently Amended) A method of assembling a semiconductor device and a lead frame comprising:
providing a lead frame having a plurality of lead fingers in strip form having a pair of side rails connecting each lead frame to another in the strip, each lead finger of the plurality of lead fingers having an end forming an opening between the ends of the plurality of lead fingers of the lead frame having a size of one of at least a size of an attachment surface of a

semiconductor device and greater than the attachment surface of the semiconductor device;
using [forming] at least two tape segments shaped to fit over a portion of the ends of the plurality of lead fingers of the lead frame, the at least two tape segments extending across the opening having a size of one of at least the size of the attachment surface of the semiconductor device and greater than the attachment surface of the semiconductor device; and
adhesively attaching the at least two tape segments to the portion of the ends of the plurality of lead fingers, the at least two tape segments being spaced to define at least one opening between the at least two tape segments providing an attachment location for the semiconductor device therein.

11. (Previously Presented) The method of claim 10, further including forming a plurality of apertures in at least one tape segment of the at least two tape segments.

12. (Original) The method of claim 11, wherein the plurality of apertures substantially forms a grid-like pattern of apertures.

13. (Previously Presented) The method of claim 11, further including:
attaching the semiconductor device to the at least one tape segment of the at least two tape segments having at least a portion of an outer periphery of the semiconductor device adjacent to a periphery of at least one aperture of the plurality of apertures.

14. (Previously Presented) The method of claim 13, wherein the semiconductor device is attached to the at least one tape segment such that at least a portion of the outer periphery of the semiconductor device is positioned within the at least one aperture of the plurality of apertures.

15. (Original) The method of claim 13, further including:
wire bonding contacts of the semiconductor device to the ends of the plurality of lead fingers.
16. (Original) The method of claim 10, further including:
packaging the semiconductor device in an encapsulating material to form a packaged
semiconductor integrated circuit device.
17. (Previously Presented) The method of claim 16, further comprising forming the at
least two tape segments to fit within the encapsulating material.
18. (Previously Presented) The method of claim 10, wherein the at least two tape
segments comprises three or more tape segments.
19. (Previously Presented) The method of claim 10, further including forming at least
one aperture in at least one tape segment of the at least two tape segments.
20. (Previously Presented) The method of claim 10, wherein the adhesively attaching
the at least two tape segments to the portion of the ends of the plurality of lead fingers comprises
spacing the at least two tape segments to define at least two openings between the at least two
tape segments.